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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,864	07/14/2003	Hiroshi Shigetaka	9281/4602	6963

7590 09/22/2006

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EXAMINER

HOLTON, STEVEN E

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/618,864

Applicant(s)

SHIGETAKA, HIROSHI

Examiner

Steven E. Holton

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This Office Action is made in response to applicant's amendment filed on 7/19/2006. Claims 1-10 are currently pending in the application. An action follows below:

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerpheide et al. (USPN: 6680731), hereinafter Gerpheide in view of Taylor et al. (USPgpPub: 2003/0025679), hereinafter Taylor.

Regarding claims 1, 4, and 8, which are drawn to similar inventions, Gerpheide discloses a touchpad input device with electrodes formed on a flexible substrate and the substrate having an extension (Fig. 10A, elements 82 and 84) with a circuit substrate provided in the extension (Fig. 10A, element 82). Further, Gerpheide discloses, "adhering the plastic sheets up against a bottom surface of a keyboard cover (col. 5, lines 61-62)". The Examiner notes that this adhering of the two elements is bonding them together; therefore, Gerpheide discloses bonding the flexible substrates to an insulating support plate. The Examiner notes Gerpheide discusses that by attaching the flexible sheets to the rear of the keyboard cover a support surface beneath the touch

input device is no longer needed (col. 5, lines 59-61). However, Gerpheide does not expressly disclose providing the X and Y electrode layers on a single substrate but rather on two substrates held close together (Fig. 4).

Taylor discloses a touch pad device with the X and Y electrode layers disclosed on the same flexible substrate (Fig. 5, elements 60, 62, and 66; paragraphs 62, 64 and 65).

At the time of invention it would have been obvious to one skilled in the art to combine the teachings of Gerpheide and Taylor to produce a device as specified in claims 1, 4, and 8. The motivation for doing so is one of design choice, as discussed by Taylor in paragraphs 63 and 64, methods for providing the X and Y electrodes on two substrates and one substrate are possible for the application but Taylor chooses to utilize a single substrate. Thus, it would have been a matter of design choice to utilize a two substrate touch sensor or a single substrate touch sensor with a flexible substrate to produce a device as specified in claims 1, 4, and 8.

Regarding claims 2, 5, and 10, Gerpheide discloses fitting the touch sensor to the underside of a curved surface such as the wrist rest of a keyboard (col. 5, lines 12-14). This would be a recessed area of the surface to hold the input sensor area.

Regarding claims 7 and 9, Gerpheide discloses fitting the touch sensor on the underside of arcuate surfaces (col. 5, lines 16-18).

Regarding claims 3 and 6, Gerpheide discloses highlighting the area on the housing or support surface that is above the touch area so that a user is able to determine where the touch sensor is located (col. 5, line 64 – col. 6, line 2).

***Response to Arguments***

3. Applicant's arguments filed 7/19/2006 have been fully considered but they are not persuasive.

The Examiner disagrees with the statement that Gerpheide fails to disclose bonding the flexible electrodes to the rear surface of a support plate. As shown above, Gerpheide states that the flexible plastic electrodes can be adhered to the bottom of the keyboard cover (col. 5, lines 61-62), the adhering of the two together is the same as bonding the electrode to the rear of the keyboard cover. Thus, the arguments regarding a lack of teaching as to the bonding of electrodes to the rear of the support plate are not persuasive and the Examiner maintains his rejection of the claims.

***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven E. Holton whose telephone number is (571) 272-7903. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven E. Holton  
Division 2629  
September 7, 2006

AMR A. AWAD  
SUPERVISORY PATENT EXAMINER

